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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,142	10/16/2003	Michael R. Furst	A2486-US-NP XERZ 2 01277	8247
27885	7590	05/21/2009	EXAMINER	
Fay Sharpe LLP				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/687,142

**Applicant(s)**

FURST ET AL.

**Examiner**

LENNIN R. RODRIGUEZ

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection. Applicant's argument are based on the newly submitted limitation therefore requiring further search from the examiner.
2. Objection to the claims has been withdrawn in view of the submitted amendment.

***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/18/2009 has been entered.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim1-2, 4-6 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal et al. (US 7,043,738) in view of Ebner et al. (US 5,384,620) and Mukaiyama et al. (US 6,631,407).

(1) regarding claim 1:

Mandal '738 discloses an embedded system comprising data collection (column 5, lines 63-67 and column 6, lines 1-3, where instances contain data) and display functionality (column 14, lines 1-14), and a local UI for operation and management of functionality locally (446 in Fig. 4), and a services platform and APIs for remote connectivity (column 5, lines 38-57) and device-centric services (column 4, lines 10-20), and

wherein the embedded system comprises a device model agent (column 2, lines 53-64, where there is an agent managing the device) representative of service management of the device in communication with a remote services host (column 5, lines 46-57) and a remote asset management system through the APIs (column 5, lines 38-57) for communicating through the local UI services to be selectively added to or performed on the device (column 14, lines 1-14), which services are determined by the remote services host and the remote asset management system by the communication with the device model agent (column 6, lines 18-44).

Mandal '738 discloses all the subject matter as described above except an embedded system connected to an IOT of an electroreprographic device through at least one existing device interface.

However, Ebner '620 discloses an embedded system (12 in Fig. 1) connected to an IOT (20 in Fig. 1) of an electroreprographic device (16 in Fig. 1) through at least one existing device interface (14 in Fig. 1).

Having a system of Mandal '738 reference and then given the well-established teaching of Ebner '620 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738 to include the embedded system connected to an IOT of an electroreprographic device through at least one existing device interface as taught by Ebner '620 because it would make the Mandal '738 system more versatile and able to have connections with other devices providing more capabilities for the user to choose.

Mandal '738 and Ebner '620 disclose all the subject matter as described above except the device model agent actively, dynamically monitoring device events, device status and consumable component supplies.

However, Mukaiyama '407 teaches the device model agent actively, dynamically monitoring device events, device status (column 1, line 60 through column 2, line 7 and column 7, line 39 through column 8, line 11) and consumable component supplies (column 11, lines 11-23, where toner levels and amount of paper left are monitored (Fig. 10)).

Having a system of Mandal '738 and Ebner '620 and then given the well-established teaching of Mukaiyama '407 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738 to include the device model agent actively, dynamically monitoring device events, device status and consumable component supplies as taught by Mukaiyama '407 because it would make the Mandal '738 and Ebner '620 system more versatile and leads to a device management network system

that is capable of monitoring the operation status of the network devices in real time via Web browsers without degrading the performance of the network (column 4, lines 3-8).

(2) regarding claim 2:

Mandal '738 further discloses a networked, embedded personal computer in a housing with no direct input or output devices (1100 in Fig. 11, where there is not apparent direct input or output in the terminal).

(3) regarding claim 4:

Mandal '738 further discloses a UI available via a browser running on a computer on a network to which the system is connected (column 14, lines 1-14).

(4) regarding claim 5:

Mandal '738 further discloses a web server (column 17, lines 39-45).

(5) regarding claim 33:

Mandal '738 further discloses wherein the services comprise one of operating software upgrades (column 8, lines 8-15), device stack supply or maintenance adjustments.

(6) regarding claim 6:

Mandal '738 further discloses an embedded system comprising a web browser (column 14, lines 1-14), comprising:

configuring the embedded system with network information (column 13, lines 57-67);

using a browser as the local UI for the embedded system (column 14, lines 1-14),  
and

wherein the embedded system comprises a device model agent (column 2, lines 53-64, where there is an agent managing the device) representative of service management of the device in communication with a remote services host (column 5, lines 46-57) and a remote asset management system through the APIs (column 5, lines 38-57) for communicating through the local UI services to be selectively added to or performed on the device (column 14, lines 1-14), which services are determined by the remote services host and the remote asset management system by the communication with the device model agent (column 6, lines 18-44).

Mandal '738 discloses all the subject matter as described above except in an embedded system connected to an IOT of a device and to a network, a method of interacting with the embedded system.

However, Ebner '620 discloses an embedded system (12 in Fig. 1) connected to an IOT (20 in Fig. 1) of an electroreprographic device (16 in Fig. 1) and to a network (26 in Fig. 1), a method of interacting with the embedded system (Figs. 3A-3D).

Having a system of Mandal '738 reference and then given the well-established teaching of Ebner '620 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738 to include the embedded system connected to an IOT of an electroreprographic device through at least one existing device interface as taught by Ebner '620 because it would make the Mandal '738 system more versatile and able to have connections with other devices providing more capabilities for the user to choose.

Mandal '738 and Ebner '620 disclose all the subject matter as described above except the device model agent actively, dynamically monitoring device events, device status and consumable component supplies.

However, Mukaiyama '407 teaches the device model agent actively, dynamically monitoring device events, device status (column 1, line 60 through column 2, line 7 and column 7, line 39 through column 8, line 11) and consumable component supplies (column 11, lines 11-23, where toner levels and amount of paper left are monitored (Fig. 10)).

Having a system of Mandal '738 and Ebner '620 and then given the well-established teaching of Mukaiyama '407 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738 to include the device model agent actively, dynamically monitoring device events, device status and consumable component supplies as taught by Mukaiyama '407 because it would make the Mandal '738 and Ebner '620 system more versatile and leads to a device management network system that is capable of monitoring the operation status of the network devices in real time via Web browsers without degrading the performance of the network (column 4, lines 3-8).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal et al. (US 7,043,738), Ebner et al. (US 5,384,620) and Mukaiyama et al. (US 6,631,407) as applied to claims above, and further in view of Engstrom et al. (US 6,463,078).

(1) regarding claim 3:



Mandal '738, Ebner '620 and Mukaiyama '407 disclose all the subject matter as described above except wherein the system is connected to the IOT through at least two physical interfaces.

However, Engstrom '078 further discloses wherein the system is connected to the IOT through at least two physical interfaces (152 and 151 in Fig. 3).

Having a system of Mandal '738, Ebner '620 and Mukaiyama '407 and then given the well-established teaching of Engstrom '078 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738, Ebner '620 and Mukaiyama '407 to include that the system is connected to the IOT through at least two physical interfaces as taught by Engstrom '078 because it would make the Mandal '738 and Ebner '620 system more versatile and able to have more connections with other devices providing more capabilities for the user to choose.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal et al. (US 7,043,738), Ebner et al. (US 5,384,620) and Mukaiyama et al. (US 6,631,407) as applied to claims above, and further in view of Frailong et al. (US 6,496,858).

Mandal '738, Ebner '620 and Mukaiyama '407 disclose all the subject matter as described above except wherein configuring the embedded system includes loading network proxy, firewall password, and DNS IP addresses.

However, Frailong '858 further discloses wherein configuring the embedded system includes loading network proxy (column 5, lines 21-23, where a gateway is a proxy server), firewall password (column 5, lines 21-23, where the network security

involving a firewall is being interpreted as firewall password since in order to have a secure network it is necessary to have a password to maintain the connection secure of possible threads), and DNS IP addresses (column 12, lines 57-60).

Having a system of Mandal '738, Ebner '620 and Mukaiyama '407 reference and then given the well-established teaching of Frailong '858 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the embedded system of Mandal '738, Ebner '620 and Mukaiyama '407 to include the embedded system connected to an IOT of an electroreprographic device through at least one existing device interface as taught by Frailong '858 because it would allow the system to be configure to work through a network at the same time that is making a secure connection, providing more capabilities for the user to choose.

8. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandal et al. (US 7,043,738), Ebner et al. (US 5,384,620) and Mukaiyama et al. (US 6,631,407) as applied to claims above, and further in view of Cabrera et al. (US 2003/0177183).

(1) regarding claim 8:

Mandal '738, Ebner '620 and Mukaiyama '407 disclose all the subject matter as described above except wherein configuring the embedded system enables the embedded system to connect to an edge server.

However, Cabrera '183 teaches wherein configuring the embedded system enables the embedded system to connect to an edge server (paragraph [0012], lines 11-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the embedded system enables the embedded system to connect to an edge server as taught by Cabrera '183, in the system of Mandal '738, Ebner '620 and Mukaiyama '407. By doing this the system will be secure and trusted, adding an additional level of security by having an edge server.

(2) regarding claim 9:

Mandal '738, Ebner '620 and Mukaiyama '407 disclose all the subject matter as described above except wherein the edge server manages the queues, messages, services, and transactions associated with the end-to-end operation of the device services.

However, Cabrera '183 teaches wherein the edge server manages the queues, messages, services, and transactions associated with the end-to-end operation of the device services (paragraph [0057], lines 12-21).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the embedded system enables the embedded system to connect to an edge server as taught by Cabrera '183, in the system of Mandal '738, Ebner '620 and Mukaiyama '407. By doing this the system will be secure and more efficient, since the edge is performing additional functionalities, thus increasing the versatility.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENNIN R. RODRIGUEZ whose telephone number is (571)270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

/Lennin R Rodriguez/  
Examiner, Art Unit 2625